

CZERWINSKA, E.; ECKSTEIN, Z.; KOSCIELNY, J.; KOWALIK, R

On biological activity of 5-arylozo-5-nitro-1,3-dioxathiane-3-oxide derivatives. Bul chim PAN 13 no.1:17-19 '65.

1. Department of Organic Technology II of the Warsaw Technical University and Mycological Laboratory of the Institute of Organic Industry, Warszawa. Submitted November 25, 1964.

ECKSTEIN, Zygmunt

Suggestions and remarks concerning proper information in pesticides found in professional literature. Postępy nauk roln 12 no.1:107-112 Ja-F '65.

1. Institute of Technology of Plant Protection Agents of the Department of Organic Technology II of Warsaw Technical University.

STEJSKAL, Imbor; ECKSTEINOVA, Hana

Parinaud's syndrome in encephalomyelopolyradiculoneuritis. Cesk. neur.
21 no.6:412-416 Nov 58.

1. Janske lazne, lekarsky reditel MUDr. Fr. Pokorny.

(GUILLAIN-BARRE SYNDROME, compl.

Parinaud's synd. (Cz))

(MUSCLES, OCULOMOTOR, paralysis

Parinaud's synd., with Guillain-Barre synd. (Cz))

COUNTRY : Rumania B-11
 CATEGORY : Physical Chemistry--Solutions. Theory of Acids
 and Bases.
 ABS. JOUR. : RZhim., No. 5 1960, No. 17116
 AUTHOR : Vintu, V., Istudor, I., and Eclemea, N.
 INST. : Bucharest Institute for Petroleum and Natural Gas *
 TITLE : On the Absorption of Ethylene in Solutions of
 Amino Complexes
 ORIG. PUB. : Lucrarile Inst Petrol si Gaze Bucuresti, 3, 207-
 217 (1957)
 ABSTRACT : The authors have determined the coefficient of ab-
 sorption of ethylene at room temperature and at
 pressures of 1-20 atm in solutions of the follow-
 ing amino complexes of Cu(2+): $[Cu(NH_3)_4]Cl_2$,
 $[Cu(NH_3)_4](NO_3)_2$, as well as complexes of Cu(2+)
 with pyridine: $[Cu(C_5H_5N)_2](NO_3)_2$, $[Cu(C_5H_5N)_4]-($
 $NO_3)_2$, and $[Cu(C_5H_5N)_4]Cl_2$, both in the liquid
 and in the solid state [sic]. The results ob-
 tained indicate the formation of compounds be-
 tween the ethylene and amino complexes of Cu(2+);
 CARD: 1/2 * Research

COUNTRY : Rumania
CATEGORY :

B-11

ABS. JOUR. : RZKhim., No. 5 1960, No.

17116

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : no such compound formation was observed to take
place in the solid state.

R. Mocharnyuk

CARD: 2/2

49

ECLER, Frantisek

Measuring and controlling the humidity of foundry molding mixtures.
Slevarenstvi 10 no.11:430-432 N '62.

1. Zavody V.I. Lenina, Vyzkum slevarenskych stroju, Brno.

ECLER, Frantisek, inz.; KLIMES, Milan, inz.

Brno International Fair 1963. Good kart obzor 9 no.12:
337-339 D'63.

STEINBACH, M.; GEORGESCU, Mircea; VASILIU, I.; ECONOMU, C.; LAZAROVICI,
Miriam

Research on lipid metabolism in workers under nervous tension
(telephone operators). Stud. cercet. med. intern. 4 no.2:207-210
'63.

(ARTERIOSCLEROSIS) (OCCUPATIONAL DISEASES) (LIPID METABOLISM)
(STRESS) (BLOOD CHOLESTEROL)

ECONOMU, Radu, consilier juridic sef adjunct

Juridical means for improving the hauling time of railroad cars. Rev cailor fer ll no.9:507-510 S '63.

ECONOMU, Radu

Juridical means for ensuring integral utilization of the
loading capacity of railroad cars. Rev sailor fer 11 no.
12: 683-684 D '63.

1. Consillier juridic sef adjunct in M.T.Te.

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EXCERPTA MEDICA Sec 9/Vol 13/5 SURGERY May 59

ons
X, 190)

2301. (728) VARIATIONS OF LENGTH OF THE TIBIA IN CHILDREN AFTER GRAFTS WERE TAKEN - Variații de lungime ale tibiei la copii după prelevarea de grefoane - Economu Th., Berneagă A., Gavriliș N., Purice E. and Frunză A. Inst. de Med., Clin. de Chir. Infant. și Ortop., Iași - REV. MED. CHIR. IAȘI 1958, 62/2 (311-317) Tables 6 illus. 4

Clinical and radiographical measurements were used in a study of 42 children, aged 5-17 yr. in whom tibial grafts were taken for vertebral fusion (37 cases) or extra-articular arthrodesis of the hip (5 cases). Two months to 4 yr. after the operation the tibiae were of equal length in 50% of cases while there was an elongation of 0.5-2 cm. in 38% and a shortening of 0.5-2 cm. in 12%. In 62.6% the elongations appeared in children under 10 yr. There was a lack of precision of the clinical measurements in 50.6% of the children and the necessity of radiographic measurement is emphasized. Based on these findings it is recommended to avoid the taking of tibial grafts in children. In cases with unequal limbs in children under 10 yr., grafts should be taken from the shorter extremity, because the elongation is much more frequent (76% from the total of the modifications found), than shortening.

EXCERPTA MEDICA Sec 9 Vol 13/1 Surgery Jan 59

58. THE PRESENT-DAY TREATMENT OF TUBERCULOUS PSOAS AND PRE-SACRAL ABSCESES - Die gegenwärtige Behandlung der tuberkulösen Psoas- und präsakralen Abszesse - Economu T., Berneaga A., Frunza A. and Purice E. Chir. Kinderärztl. und Orthop. Klin., Jassy (Rum.) - Z. ORTHOP., 1958, 90/2 (171-178) illus. 8

An account of experience in 68 operations on 50 children, from 2-16 yr., with psoas and pre-sacral abscesses. Excochleation of the focus was done in 82% of cases and in 10% the bone graft was applied 'in situ'. In the rest of the cases, spinal fusion was done after 2 months to 1.4 yr. The authors insist on the importance of the preoperative abscessography, done in 50% of the cases, and also on the influence of the postoperative drainage and instillation of antibiotics.

(IX, 19)

EXCERPTA MEDICA Sec 8 Vol 12/10 Neurology Oct 59

5060. TREATMENT OF THE PARALYTIC KNEE IN POLIOMYELITIS - Considerații asupra tratamentului genunchiului paralytic din poliomielită - Economu Th., Botez R., Năstase N. and Tulească I. Inst. de Med., Iași - REV. MED. CHIR. IAȘI 1959, 63/1 (71-77) Tables 2 Illus. 10

Ten of 26 patients were treated in the period of remission and 16 in the period of sequelae. In the 1st group the operability index was 50% and the mean period of hospitalization 111.4 days; in the 2nd group the figures were 92.8% and 130 days. The indications for conservative and surgical treatment in these 2 periods are discussed. The need for early treatment and supervision is emphasized. (L,8,9,19)

ROMANIA

ECONOMU, V., MD, Pharmacist.

Pharmacy No 145, Bucharest (Farmacia 145, Bucuresti)

Bucharest, Farmacia, No 7, Jul 63, pp 425-427

"Contribution to the Preparation of Injectable Iodine-Thymol Solutions."
(Paper presented at the Regional Scientific Meeting on Pharmacy,
Iasi, 1961.)

ECSEDI, Jenő

E-3

HUNGARY/Analytic Chemistry - Analysis of Organic Substances.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46478

Author : Pal Nanasi, Rezső Bogner, Maria Puskas, Farkas Teichmann, Jenő ECSEDI

Inst : Debrecen University.

Title : Study of Carbohydrate Derivatives by Paper Chromatography Method.

Orig Pub : Acta Univ. debrecen., 1956, (1957), 3, No 2, 95-103.

Abstract : The chromatographic separation of simple and complex sugars, primary aromatic amines, N-aryl derivatives of glucosylamines (I) and corresponding aglycones in the case of their simultaneous presence was carried out and the values of R_F -s were determined. 6 mixtures of solvents were tried, the mixture n-butanol - pyridine - water (6 : 4 : 3) proved to be the best for free sugars. Some substances could be determined on the chromatograms only spectrophotometrically in the ultraviolet region. The chromatographic separation of hydrolysis products of acetylated I derivatives was used for proving their structure. In such cases, the mixture methanol - n-amyl alcohol - benzene - water was used for the development of chromatograms. The chromatographic method of semiquantitative (accuracy up to 10 - 15%) determination of tetraacetyl-d-glucose and tetraacetyl-glucose-ne on acetylated paper with the mixture water - pyridine - ethyl alcohol (10 : 5 : 1) was developed. The method was used for the study of the mechanism and the interaction rate of aromatic amines, acetobromoglucose and alkali in acetone solution.

YCSERY, Zoltan

Saponification of esters in benzene solution by potash lye
adsorbed on large-surface solid substances. Magyar kém folyoir
66 no.7:264-267 J1 '60.

1. Chinoin Gyogyszer- es Vegyszeti Termek Gyara, Budapest.

ECSERY, Zoltan; HERCSEL, Imre

Preparation of esters from acid and alcohol by phosphorous-
oxychloride in a pyridic agent. Magy kem folyoir 66 no.11:447-450
N '60.

1. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara, Budapest.

ECSERY, Zoltan; MULIER, Miklosne

D₂- vitamin reduction by alkaline metals. Magy kem folyoir 67
no.8:330-332 Ag '61.

1. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara, Budapest

ECSERY, Zoltan; MULLER, Miklosné

Experiments for the synthesis of 1-phenyl-cyclohexyl-3-piperidine-propanol-1. Magy kem folyoir 69 no.4:176-178 Ap '63.

1. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara, Budapest.

ECSERY, Zoltan

Bromination of 3,4-diacyloxy-tolucés and identification
of the obtained bromine compounds. Magy kem folyoir 69 no.10:
454-455 0 '63.

1. Chinoin Gyogyszer es Vegyeszeti Termekek Gyara, Budapest.

ECSERY, Zoltan; MULLER, Miklosne; KOSA, Ildiko

Preparation of ethylene-diamine derivatives. Magyar kemiai folyoirat
69 no.12:540-543 D'63.

1. Chinoin Gyogyszer es Vegyszereszerkezetek Gyara, Budapest.

BINDER, László, dr.; ECSEI, Edith, dr.; SZENTPÉTERY, Bodo, dr.

Salmonella saintpaul infection with fatal outcome. Orv.hetil.
101 no.3:94-96 Ja '60.

1. Budapest Fovarosi Tanacs László korház.
(AORTIC ANEURYSM compl.)
(SALMONELLA INFECTIONS case reports)

BINDER, Laszlo, dr.; NCSI, Edit, dr.

Cortisone therapy of orchitis appearing as a complication on
epidemic parotitis. Orv.hetil. 101 no.34:1208-1209 21 Ag '60.

1. Fovarosi Laszlo korhas, III. Belosztaly
(MUMPS compl)
(ORCHITIS etiol)
(CORTISONE ther)

MARTON, K.; ECSI, EM.

Study-tour to Albert Schweitzer's hospital. Orr. Letti. 196
no.3:134-135 Ja 17 '64.

... Ecsichof, T.
Rumania/Analytical Chemistry - Analysis of Organic Substances, G-3

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1286

Author: Frehden, O., and Ecsichof, T.

Institution: None

Title: Chromatographic Separation of Acetaldehyde from Vinyl Acetate and
Description of a Quick Method for Its Determination

Original
Periodical: Rev. chim., 1956, Vol 7, No 5, 304-308 (published in Rumanian with
summaries in German and Russian)

Abstract: The separation of vinyl acetate (I) from acetaldehyde (II) is based
on the precipitation of II with $\text{Na}_2\text{S}_2\text{O}_5$ (III) and the adsorption of
the precipitate on the III. After purification the content of II in
I is less than 0.1%. The apparatus consists of a vertical column
packed with III, to the upper part of which is attached a spherical
condenser, through which III is introduced from a separatory funnel.
The lower end of the column is connected to a 2-necked receiver flask,
to the second neck of which is connected a condenser which in turn is

Rumania/Analytical Chemistry - Analysis of Organic Substances, G-3

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1286

Abstract: connected to the vacuum system. Cooling is applied in order to reduce losses of I through evaporation. An iodometric technique has been developed for the determination of II in I. A 1-5 ml sample of I (or a solution in CH_3OH or $\text{C}_2\text{H}_5\text{OH}$) containing less than 0.05 gms II is treated with 10 ml of a 1% solution of NaHSO_3 . After allowing to stand for 10 minutes with frequent stirring, the excess NaHSO_3 is titrated with 0.1 N solution of I_2 in the presence of starch as an indicator. A control experiment is run on 1% NaHSO_3 solution prepared from 5 gms $\text{Na}_2\text{S}_2\text{O}_5$, 950 ml water, and 5 ml $\text{C}_2\text{H}_5\text{OH}$.

Card 2/2

ECSODI, Andras

Opening of the Danubian Cement and Lime Works. Epitoanyag 15 No.12:463
D '63.

HUNGARY

KERKOVITS, Gyula, Dr, HALVAX, Eva, Dr, ECSY, Katalin, Dr; Capital City Bajcsi-Zsilinszky Hospital (Fovarosi Bajcsi-Zsilinszky Kórház), Budapest.

"Data on the Genesis of the Wolf-Parkinson-White (WPW) Syndrome."

Budapest, Orvosi Hetilap, Vol 104, No 31, 4 Aug 1963, pages 1449-1452.

Abstract: [Authors' Hungarian summary] In five cases of W.P.W. syndrome, the symptoms disappeared temporarily after the i.v. administration of 0.2-0.5 g procaine amide. This finding indicates that the heterotropic stimulating center of the ventricle may play a role in the development of the syndrome. In the cases discussed it is probable that the W.P.W. syndrome is not caused by some organic defect. In addition to the theoretical interest, the procaine amide test has a diagnostic value as well. 27 Western, 10 Hungarian references.

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
PROCESSES AND PROPERTIES INDEX																			
<div style="position: relative;"> <div style="position: absolute; top: 10px; left: 10px; font-size: 2em; font-weight: bold;">H</div> <div style="position: absolute; top: 10px; right: 10px; font-size: 2em; font-weight: bold;">27</div> <div style="position: absolute; top: 100px; left: 100px; font-size: 1.5em; font-weight: bold;">ECSY, L.</div> <div style="position: absolute; top: 300px; left: 350px; font-size: 1.2em;">621.187.1:684.1</div> <div style="position: absolute; top: 350px; left: 80px; font-size: 1.2em;"> <p>27. The importance of the control of boiler feed water in sugar mills, by K. Yukov and L. Essy, "Cankoripar" The Sugar Industry Vol. III, No. 5, pp. 108-110, May, 1950.)</p> <p>The large quantity of distilled water derived from the stills in sugar mills is a good source of water supply for feeding boilers, though very often its purity is not up to standard; this is especially true of high pressure boilers</p> <p>22 to 23.4. even the cause In this case the with the boiler water should not exceed 50 mg/liter, and water should contain not more than 3 per cent of this amount. The the sugar content of feed water by means of the alpha naphthol reaction is a difficult problem. An apparatus has been constructed which operates on the principle of the Wheatstone bridge for measuring electrical conductivity of the water. This apparatus is suitable for controlling the sugar content of water; however, the measuring procedure does not take place in the feed boiler but just immediately after the water flows from the heating boiler. By this method 0.05 to 0.05 per cent of sugar can be detected in the condenser water of the pre-heaters. This method combined with half hourly alpha naphthol control tests will ensure to a much greater extent that the boiler feed water will be free from any sugar content</p> </div> </div>																			
<div style="display: flex; justify-content: space-between;"> 621.187.1:684.1 621.187.1:684.1 </div>																			
ASD-55A METALLURGICAL LITERATURE CLASSIFICATION																			
1ST COLUMN										2ND COLUMN									
SUBJECTS WITH ONLY ONE										SUBJECTS WITH ONE OR MORE									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100									

ECSY, L.		PROCESS AND PROPERTIES INDEX	
664.123.017:643.842		31	
<p>66. Determining the moisture content in dried beet pulp by measuring the dielectric constant of the slices, by L. Ecsy, M. Tegze and K. Vukov. "Cukoripar" - The Sugar Industry - Vol. III, No. 9, pp. 203-206, Sept., 1950, 2 figs.).</p> <p>If dried beet pulp is stored in an excessively moist state it may induce fermentation or even spontaneous combustion; on the other hand, extreme drying leads to unnecessary heat consumption. It is essential, therefore, to control frequently, and, if possible, by a rapid process, the moisture content of the beet pulp continuously discharged from the drying plant. For this purpose an apparatus was designed to determine the moisture by measuring its dielectric constant. A constant frequency current was generated by an electronic tube oscillator. The grid circuit of the electronic tube contains a piezoelectric</p>		<p>resonator, and in the anode circuit an oscillatory circuit. From the standpoint of practical application the oscillator was designed for a frequency of 4.5×10^6 c/s, i. e. for an emission of electromagnetic waves of approx. 67 m. The measuring circuit was placed in the oscillating circuit of the anode circuit. If pulp is fed into the measuring condenser its capacity increases. This increased capacity can again be balanced by switching off certain parts of the compensating condenser. Since an almost linear correlation exists between the changes in the capacity of the measuring condenser and the moisture content of the pulp, the angle dial of the compensating condenser can be calibrated to show the actual moisture content in percentage. 120 g of pulp is sufficient for a determination. The test can be performed with an error limit of 0.26 per cent in about five minutes, including the weighing of the sample.</p>	
<p>ASA 35.4 METALLURGICAL LITERATURE CLASSIFICATION</p>		<p>664.123.017</p>	

into the reaction chamber when the request is made

ECSY, Laszlo, fenyvnok

Constructing a Garbe boiler at the Kaposvar Sugar Factory.
Guker 12 no.5;106-109 My '59.

ECSY, Laszlo, fomernok

The 1959 spring Leipzig Fair as seen by a sugar-industry expert. Cukor 12 no.6:137-142 Je '99.

1. Kaposvari Cukorgyar.

ECSY, Laszlo; ERDESZ, Istvan

Slice briquetting at the Kaposvar Sugar Factory. Cukor
13 no.9:245-248 S '60.

ECSY; TEGZE; VUKOV, Konstantin, dr.

Calibration of the Ecsy-Tegze-Vukov conductometer. Cukor 14,
no.12:321-322 D '61.

1. "Cukoripar" szerkeszto bizottsagi tagja (for Vukov).

ECZFALVY, Sandor, okleveles mernok

Some hydrological problems of artesian wells. Bany lap 95 no.10:663-670 o '62.

1. Vizugyi Tervezo Iroda, Budapest.

Ede, S.

LASZLO, P.; EDM, S.; ISTVAN, R.

The effect of resactor on the hemopoiesis of arsenoxyd-treated mice.
Borgybg. vener.szemle 4 no.4:110-113 Ap '50. (GIML 19:3)

1. Skin and Venereal Diseases Clinic (Director -- Dr. Ferenc Fold-
vari) Peter Pazmany University, Budapest.

DARVASH, Laslo [Darvas, L.]; ~~EDEDI, Laslo~~ [Ededy, L.] (Vengriya)

Treatment of Bechterew's disease with ultrasound. Vop. kur.,
fizioter. i lech. fiz. kul't. 24 no. 4:346-349 J1-Ap '59.
(MIRA 13:8)

1. Iz revmaticheskogo otdeleniya polikliniki imeni Treforta
v Budapeshte (dir. L. Ededi).
(ARTHRITIS, RHEUMATOID) (ULTRASONIC WAVES—THERAPEUTIC USE) *

EDEL, Istvan (Budapest)

Forum of innovators. Ujit lap 16 no.21:30 10 N '64.

NOEL', Yu.P.

Causes of leaving foreign bodies in wounds during surgery.

Khirurgiya 32 no.6:76-79 Je '56.

(MLRA 9:10)

1. Sudebno-meditsinskaya ekspertiza g. Khar'kova.

(FOREIGN BODIES

forgetting for. bodies in wds. during surg.)

(SURGERY, OPERATIVE, compl.

forgetting for. bodies in wds.)

EDEL', Yu. P., Cand Med Sci -- (diss) "Medical Errors and Responsibility of the Physician (Based on Medicolegal Data). " Khar'kov, 1957. 14 pp (Saratov State Med Inst), 200 copies (KL, 50-57, 121)

- 45 -

EDEL', Yu.P.; STRELETS, N.N. (Khar'kov)

A true 2-chamber heart in a 4-year-old child. Arkh.pat. no.11:
72-74 '61. (MIRA 14:11)

1. Iz Khar'kovskogo oblastnogo byuro sudebnomeditsinskoy eks-
pertizy (nach. - dotsent N.P. Marchenko).
(HEART--ABNORMALITIES AND DEFORMITIES)

NAMESTNIKOVA, L.N.; EDEL', Yu.P.; SEMENENKO, L.A.

Desirability of a postmortem quantitative determination of alcohol
in the contents and tissues of the stomach. Sud. - med. ekspert.
6 no.3:55 J1-S'63. (MIRA 16:10)

1. Kafedra sudebnoy meditsiny (zav. - N.P.Marchenko) Khar'-
kovskogo meditsinskogo instituta i Khar'kovskoye oblastnoye byuro
sudebno-meditsinskoy ekspertizy (nachal'nik V.M.Moiseyev).
(ALCOHOL IN THE BODY) (AUTOPSY)

EVIL, Yu. V.

Dissertation: -- "Design and Experimental Investigation of the Operating Model of a Small Hydraulic Turbine." Cand Tech Sci Leningrad Polytechnic Inst, Leningrad, 1961. (Referativnyi Zhurnal--Mekhanika, Moscow, Jan 64)

SO: Sm 316, 23 Dec. 1961

EDEL', Yu.U., kandidat tekhnicheskikh nauk.

Power testing of Pelton turbines. Energomashinostroenie no.3:3-7
Mr '56. (MIRA 9:7)

(Hydraulic turbines--Testing)

EDEL', Yu.U., kandidat tekhnicheskikh nauk.

Concerning I. N. Shtang's article "Investigation of the flow
passage of hydraulic turbines." IU. U. Edel'. Gidr. stroi. 25
no.4:56 My '56. (MLRA 9:9)

(Hydraulic turbines) (Shtang, I.N.)

BUSHUYEV, M.N., inzh., red.; BERNZIN, B.A., inzh., red.; MERNIK, M.Kh., inzh.,
red.; SUTOESKIY, N.B., inzh., red.; ~~KOMEL', Ye.U.,~~ kand. tekhn. nauk.,
red.; GOFMAN, Ye.K., red. izd-va; POL'SKAYA, R.G., tekhn. red.

[Technical development at the Leningrad Stalin Metal Works] Razvitie
tekhniki na Leningradskom metallicheskom zavode imeni Stalina.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957.
313 p. (MIRA 11:9)

(Turbines) (Leningrad--Metal industries)

SOV/124-58-5-5352

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 55 (USSR)

AUTHOR: Edel', Yu.U.

TITLE: Some Problems of the Investigation of Energy Losses in
Bucket-type Turbines (Nekotoryye voprosy issledovaniya poter'
energii v kovshevykh turbinakh)

PERIODICAL: V sb.: Gidroturbostroyeniye. Vol 4. Moscow-Leningrad,
Mashgiz, 1957, pp 55-72

ABSTRACT: A study is made of energy losses in bucket-type turbines,
and a brief survey is given of works that have been published
on this subject. The great complexity of energy-loss phenom-
ena is stressed, and the reader is reminded of how little firm
knowledge exists with respect to them. The possibility is men-
tioned that the power efficiency of bucket-type turbines can be
improved considerably.

N.A. Kolokol'tsov

1. Turbines--Performance 2. Turbines--Theory

Card 1/1

SOV/124-58-1-1237

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 154 (USSR)

AUTHORS: Edel', Yu. U., Kovalevskaya, M. A.

TITLE: Vibration Tests of a Pelton-wheel Runner (Vibratsionnyye ispytaniya rabocheho koleasa kovshevoy turbiny)

PERIODICAL: V sb.: Gidroturbostroyeniye. Nr 4. Moscow-Leningrad, Mashgiz, 1957, pp 254-258

ABSTRACT: Natural vibrations of a bucket were generated by means of the impact of a 1-kg hammer upon one of the longitudinal ribs on the back side of the bucket in a plane perpendicular to the axis of the runner.

From the résumé

Card 1/1

Edel', Yu. U.
AUTHOR: Edel', Yu, U., Candidate of Technical Sciences. 114-6-7/11
TITLE: All-Union Conference on turbine construction. (Vsesoyuznoye soveshchaniye po gidroturbostroyeniya.)
PERIODICAL: "Energomashinostroenie" (Power Generation Machinery Construction) 1957, Vol.3, No.6, p. 23. (U.S.S.R.)
ABSTRACT: A conference on turbine construction organised by the Scientific Technical Society of the Power Industry (Nauchno-tekhnicheskoe Obshchestvo Energeticheskoy Promyshlennosti) was held in Leningrad from the 23rd to the 27th April. More than 200 delegates from industrial, design and research organisations took part and about 30 reports were read. The conference was opened by Antoshin, a representative of 'Glavenergoprojekt' of the Ministry of Electric Power Stations (Ministerstvo Elektrostantsiy), who described the prospects of hydro-electric power station construction during the next two or three five year plans. During this period it will be necessary to manufacture about 500 large water turbines including about 300 Kaplan type, about 200 radial-axial type and ten or twenty Pelton type. It is proposed to increase the unit output of turbine sets to 500 MW. At the present stage of development of turbine construction special requirements are made in respect of reliability and long life. A turbine must be able to operate

Card 1/5

All-Union Conference on turbine construction (Cont.)

114-6-7/11
10-20 years without major overhaul. It is only then that it is possible to obtain the maximum economic advantages from making power stations automatic. The question of measures against overspeed which would make it possible to manage without high speed closing screens and shutters and which would permit of considerable reduction in the weight of the machines become ever more important.

L.A. Vladislavev in his report analysed effects in machines produced in recent years, described some cases of accidents in service and their causes.

An important report on design and investigational work of the water turbine office of the Leningrad Metal Works (IMZ) was read by the chief designer, corresponding member of the Ac.Sc. U.S.S.R. N.N. Kovalev. He drew attention to the lag of Soviet turbine construction behind foreign practice. The reason for this lag is an inadequate experimental-investigational base for turbine construction in our country. Moreover, full scale investigation on manufactured turbines are very rarely made and are difficult to organise. It is necessary to arrange for systematic investigation of turbines, and particular components,

Card 2/5

All-Union Conference on turbine construction. (Cont.)

under operating conditions.

114-6-7/11

N.N. Kovalev also gave examples of incorrect operation of turbines. Recently there have been frequent cases of sets being started up without the waterways being cleaned of structural materials which sometimes reduce the output of the turbine by 20 - 30%.

A.S. Eremeyev, from the 'Elektrosila' factory, reported on the new designs of hydro-alternators developed in the factory. He also emphasised the need to reduce runaway speeds.

Prof. Kvyatkovskiy gave an interesting report on the original designs of water turbine developed in the All-Union Institute of Hydro-Machine Construction (Vsesoyuznoy Institut Gidromashinostroeniya). The Institute has developed a number of variants of horizontal axial turbines, a diagonal Kaplan turbine, a propeller turbine for conditions of the Krasnoyarsk Power Station, a special design of wear-resisting turbine without guide vanes and others. Investigations have been made on inclined flow and double water turbines and the corresponding theory has been developed.

A representative of the Ministry of Power Station Construction (Ministerstvo Stroitelstva Elektrostantsiy) Mr. Gindus, spoke of what the erectors require of

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All-Union Conference on turbine construction. (Cont.)

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industry. In particular he again emphasised the advisability of closer constructional relationship between the turbine and generator in a single set (using a single shaft, transferring the servo-motor of the runner from the turbine frame to the generator zone, etc.)

At sectional sessions a report was read by Prof. Prigorovskiy on the works of the Institute of Engineering of the Ac.Sc.U.S.S.R. (Institut Mashinovedeniya Ak.Nauk SSSR) on the investigation of the strength of water turbines and also a number of other reports, on the strength and hydro-dynamic investigation of water turbines at the Leningrad Metal Works (LMZ), on polarised light investigations of stress distribution in water turbine parts, on methods of allowing for the scale effects in analysing losses in water turbines, on a new method of investigating cavitation, on the investigation of reversible sets, etc.

A number of reports were concerned with questions of governing and automatics and also to questions of shaping the runners and to full-scale tests on water turbines.

In the decisions adopted at the final session mention is first made of the need for better co-ordination of investigation and design work carried out by different organisations.

Card 4/5

All-Union Conference on turbine construction. (Cont.)

114-6-7/11
It was decided that such co-ordination should be the responsibility of the Leningrad Metal Works, together with Ts.ENTOEP. In view of the backwardness of domestic water turbine construction the conference unanimously recognised the need to set up a united All-Union Research Institute for large, medium and small water turbine construction associated with the Leningrad Metal Works. The main directions of water turbine development during the next few years were also indicated. The proceedings of the conference will be published.

There are no figures and no literature references.

AVAILABLE:

Card 5/5

HEML', Yu.U., kand. tekhn. nauk; STEPANOV, A.P., inzh.

Effect of water on the frequency of vibration of blades and plates.
[Trudy] IZV no.4:138-144 '57. (MIRA 11:4)
(Vibration) (Blades) (Hydraulic models)

Edel', Yu. U., kand. tekhn. nauk.

Studying pressures and stresses in a turbina of the Krybyshav Hydroelectric Power Station. Energomashinostroenie 4 no.8:48 Ag '58. (MIRA 11:11)
(Volga Hydroelectric Power Station --Hydraulic turbines)

KOVALEV, N.N.; PRIGOROVSKIY, M.I., doktor tekhn.nauk; RUDASHEVSKIY, G.Ye.,
kand.fiz.-mat.nauk; KDEL', Yu.U., kand.tekhn.nauk

Investigating pressures and stresses in rotor blades of a
hydraulic turbine at the Narva Hydroelectric Power Station.
Energomashinostroenie 5 no.1:29-32 Ja '59. (MIRA 12:2)

1. Chlen-korrespondent AN SSSR (for Kovalev).
(Narva Hydroelectric Power Station--Hydraulic turbines)

KOVALEV, Nikolay Nikolayevich; SHCHEGOLEV, G.S., inzh., retsenzents;
EDEL', Yu.U., kand. tekhn. nauk, red.; SIMONOVSKIY, N.Z.,
red. izd-va; YURKEVICH, M.P., red. izd-va; POL'SKAYA, R.G.,
tekhn. red.

[Hydraulic turbines; design and construction] Gidroturbiny;
konstruktsii i voprosy proektirovaniia. Moskva, Mashgiz,
1961. 614 p. (MIRA 15:2)
(Hydraulic turbines—Design and construction)

EDEL', Yu.U.

Setting an aerodynamic test stand in motion. *Energomashinostroyeniye*
7 no.7:19 J1 '61. (MIRA 14:8)

(Gas turbines--Testing)
(Aerodynamic models)

EDEL', Yuriy Udovitch; VAKHRAMEYEV, B.A., inzh., retsenzent;
GRANOVSKIY, S.A., kand. tekhn. nauk, red.; MITARCHUK,
G.A., red. iad-va; SHCHETININA, A.V., tekhn. red.

[Bucket hydroturbines; theory, study, calculations] Kov-
shovye digroturbiny; teoriia, issledovanie, raschet. Mo-
skva, Mashgis, 1963. 206 p. (MIRA 16:5)
(Waterwheels)

EDEL', Yu.U., kand. tekhn. nauk

Some special features of the operating process of a
Pelton wheel type turbine. Energomashinostroenie 10 no.2:
3-6 F '64. (MIRA 17:6)

ETINBERG, I.E.; GUTOVSKIY, Ye.V., kand. tekhn. nauk, retsenzent;
EDEL', Yu.U., doktor tekhn. nauk, red.

[Theory and design of the blading of adjustable-blade
hydraulic turbines] Teoriia i raschet protochnoi chasti
povorotnolopastnykh gidroturbin. Moskva, Mashinostroenie,
1965. 349 p. (MIRA 18:5)

EDEL'BERG, G.V., prof.; SURIS, A.S.; FRIDMAN, E.Ye.

Clinical anatomical characteristics of Brenner tumor. Akush. i
gin. 35 no.1:89-90 Ja-F '59. (MIRA 12:2)

1. Iz ginekologicheskogo (zav. - prof. G.V. Edel'berg) i patologo-
anatomicheskogo (zav. - prof. Ye.Ya. Gertsenberg) otdeleniya Gorod-
skoy klinicheskoy bol'nitsy No.6 (glavnyy vrach N.S. Shervyakov) i
onkologicheskogo otdeleniya (zav. - kand.med.nauk S.L. Mints) Gorod-
skoy bol'nitsy No.36 (glavnyy vrach M.V. Kazangapova).

(BRENNER TUMOR, case reports,
(Rus))

18-8200

32625

S/137/61/000/011/103/123

A060/A101

AUTHOR: Edeleanu, S.

TITLE: Factors in corrosion cracking of austenitic stainless steels

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 49, abstract
11I327 (V sb. "Korrozion. rastreskivaniye i khрупkost'", Moscow,
Mashgiz, 1961, 119 - 131)

TEXT: All forms of stainless steel may undergo rapid corrosion cracking in certain corrosive environments. In all stainless steels it is possible to observe intercrystalline corrosion cracking which, however, may be prevented by a corresponding choice of the composition and heat-treatment of the alloy. Austenitic stainless steels may also crack in the intracrystalline fashion. This type of corrosion cracking is not affected by changes in the alloy composition and the heat-treatment, but may be affected by special modes of steel treatment. It is presumed that corrosion-active paths exist along the grains in austenitic steels. Under certain conditions this may be martensite, formed in the process of deforming the alloy, but its presence is not a necessary condition for cracking. Intracrystalline corrosion cracking occurs also in other alloy systems and that type

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S/137/61/000/011/103/123
A060/A101

Factors in corrosion cracking ...

of destruction is characteristic not only of alloys with face-centered cubic lattice. The hypothesis is put forward that the local corrosion, which is the necessary prerequisite for corrosion cracking, is caused by the autocatalytic nature of the anode process in chloride solutions. There are 25 references. See also Referativnyy zhurnal. Metallurgiya, 1961, 2I455. X

Ye. Layner

[Abstracter's note: Complete translation]

Card 2/2

EDELENYI, Bela

Internal parasitic worms of birds in Hungary. Pt.2. Allattani kozl
51 no.1/4:31-48 '64.

1. College of Agriculture, Debrecen.

EDELENYI, László, dr.

Some questions relating to the design of digital automatic systems. Mérés automat 10 no.8:229-234 '62.

KAFFKA, Karoly; GYORGY, Zoltan; VAMOS, Tibor, dr.; RITTER, Endre; MARKUS, Ferenc; BOROMISSZA, Gyula, dr.; BUJTAS, Laszlo, dr.; BUJTAS, Laszlo, dr.; EDELENYI, Laszlo; BAN, Tamas, dr.; TEGZE, Miklos, dr.; ALPAR, Imre; KERECSENYI, Gyorgy; GANGER, Gyorgy; VARGA, Istvan.

Present state and perspectives of the automation in the food industry. Elelm ipar 18 no.2:33-36 F*64

1. Committee on Measuring and Control Technique, Scientific Association of the Agricultural and Food Industry, Budapest (for Kaffka).
2. Directorate of Instrument Industry, Ministry of Metallurgy and Machine Industry, Budapest (for Gyorgy).
3. National Committee on Technical Development, Budapest (for Vamos).
4. Central Committee of Automation, Budapest (for Ritter).
5. Secretariat of Automation, Ministry of Metallurgy and Machine Industry, Budapest (for Markus).
6. Ministry of Food, Budapest (for Bojtas).
7. Technical Department, Ministry of Food, Budapest (for Alpar).

EDILEV, N. P.

EDILEV, N. P. -- "STRENGTH OF MASONRY FROM CRIMEAN YELLOW SMALL LIMESTONE BLOCK."
JUN 3 JUN 52, MOSCOW ORDER OF LABOUR RED BANNER ENGINEERING CONSTRUCTION INST
INGENI V. V. LUYBYREV (DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL
SCIENCE)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

EDIELEV, N.P., kandidat tekhnicheskikh nauk, redaktor; AZRILYANT, Ya.M.,
redaktor; MEDVEDEV, L.Ya., tekhnichskiy redaktor.

[Instructions for performing outside stone facing work under winter
conditions] Instruktsiya po proizvodstvu naruzhnykh oblitsovochnykh
rabot v zimnikh usloviakh. Moskva, Gos. izd-vo lit-ry po stroitel'-
stvu i arkhitekt., 1954. 10 p. (MIRA 8:5)

1. Russia (1923)- U.S.S.R.) Ministerstvo stroitel'stva. Tekhnicheskoye
upravleniye.

(Masonry—Cold weather conditions)

EDELEV, N.P

SEMENTSOV, S.A., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii;

EDELEV, N.P., kandidat tekhnicheskikh nauk.

Resistance of masonry under local loading by jacks. Stroil.prom. 32
no.6:32-36 Jo '54. (MLRA 7:6)
(Masonry)

KOROLEV, Nikolay Petrovich, kandidat tekhnicheskikh nauk; GALAKTIONOV, A.A.,
kandidat tekhnicheskikh nauk, redaktor; MEDVEDEV, L.Ya., tekhnicheskii
redaktor

[Exterior facing of buildings in winter] Naruzhnaya oblitsovka
zdanii v zimnee vremia. Moskva, Gos. izd-vo lit-ry po stroit. i
arkhit., 1955. 54 p. (MLRA 8:7)
(Facades--Cold weather conditions)

TOMAKOVA, I.A., kandidat tekhnicheskikh nauk; MELEEV, N.P., kandidat tekhnicheskikh nauk, nauchnyy redaktor; BEGLAK, B.A., redaktor izdatel'stva; TOMER, A.M., tekhnicheskiiy redaktor

[The use of plaster with admixtures of potash in winter plastering work] Primenenie rastvorov s dobavkoi potasha pri zimnikh shtukaturnykh rabotakh. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 52 p. (MIRA 10:1)
(Plastering)

PREPARED, M. P.

LIMONOV, S.P., inzhener; FAYTEL'SON, S.Kh., inzhener; ~~MELEY, N.P.~~, kandidat tekhnicheskikh nauk, nauchnyy redaktor; YUDINA, L.A., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiiy redaktor.

[Apartment houses made of large brick blocks; construction practices in Vladimir] Zhilee sdanie iz krupnykh kirpichnykh blokov; iz opyta stroitel'stva vo Vladimire. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt. 1957. 34 p. (MIRA 10:6)

(Vladimir--Apartment houses)
(Bricklaying)

Ed. 120, n P

GALKIN, Il'ya Grigor'yevich, kandidat tekhnicheskikh nauk; ~~EDILIN, N. P.~~
kandidat tekhnicheskikh nauk, nauchnyy redaktor; TYAPKIN, B.G.,
redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiiy redaktor

[Masonry and facing work] Kamennye i oblitsovochnye raboty. Izd.
2-oe, perer. i dop. Moskva, Gos.izd-vo lit-ry po stroit. i arkhitekt.,
1957. 207 p. (MIRA 10:7)
(Masonry) (Façades)

E. D. L. L. V., N. P.
SIZOV, Vasilii Nikolayevich, doktor tekhn.nauk, laureat Stalinskoy premii;
~~EDELIN, N.P.~~, kand.tekhn.nauk, nauchnyy red.; SKVORTSOVA, I.P.,
red., izd.-va; EL'KINA, E.M., tekhn.red.; SMOLYAKOVA, M.V., tekhn.
red.

[Construction work under winter conditions] Stroitel'nye raboty
v zimnikh usloviakh. Izd. 3., dop.i perer. Moskva, Gos.izd-vo
lit-ry po stroit., arkhitekt. i stroit. materialam, 1958. 538 p.
(MIRA 11:7)

(Building--Cold weather conditions)

EDELEV, Nikolay Petrovich, kand.tekhn.nauk; VOIYNTSEV, V.A., inzh., nauchn.red.;
SHIROKOVA, G.M., red. izd-va; MOCHALINA, Z.S., tekhn. red.

[Constructing chimneys of brick blocks] Opyt stroitel'stva
dymovykh trub iz kirpichnykh blokov. Moskva, Gos. izd-vo
lit-ry po stroit., arkhitekt. i stroit. materialam, 1961. 58 p.
(MIRA 15:2)

(Chimneys)

MELEEV, O.P.

Stand for cleaning rust and coating pipes with anticorrosive
waterproof materials. Vod. i san. tekhn. no.10:34-35 D '58.
(Corrosion and anticorrosives) (Pipe) (MIRA 11:10)

EDELEV, O.P., insh.

Efficient method of erecting mine head frames. Shakht.stroi.
no.10:10-13 0 '59. (MIRA 13:2)

1. Trest Kuzbasshakhto montash.
(Mining engineering)

EDELEV, O.P.

Nomographic charts for determining principal stresses in
selecting equipment for assembling and hoisting operations.
Suggested by O.P. Edelev. Rats. i izobr. predl. v stroi.
no. 11:29-33 '59. (MIRA 13:3)

1. Starshiy inzhener energomekhanicheskogo otdela kombinata
Kuzbassshakhtostroy.
(Hoisting machinery)

EDLEY, O.P., insh.

Calculation of steel cables used in assembling operations.
Bezop.truda v prom. 4 no.7:17-18 J1 '60.
(MIRA 13:8)

(Cables)

EDELEV, O.P.

Safety factory of the cables in the erection of elements and equipment.
Mont. i spets. rab. v stroi. 24 no.1:14-18 Ja '62. (MIRA 15:7)

1. Trest Kuabassshakhtomontazh.
(Hoisting machinery--Rigging)

SEMENOV, O.D., inzh.; EDELEV, O.P., inzh.; KOKOTOV, V.I.

Concerning the book by S.A. Podlubnyi "Assembling mine
equipment." Shakht. stroi. 8 no.9:30 S '64. (MIRA 17:12)

1. Kombinat ugol'nykh predpriyatiy Kuznetskogo kamennougol'nogo
basseyna (for Semenov). 2. Kuzbassshakhtomontazh (for Edelev).
3. Kemerovoshkhtomontazh (for Kokotov).

EDELEV, YA.I.

BESKIN N.M. (Moskva); KOTOK, A.A. (Grodno); STRELETSKIY, E.V. (Grodno);
ELISH, G.M. (Baku); KAGAN, L.S. (Baku); EDELEV, Ya.I. (Ufa).

"Geometry textbook" by N.N. Nikitin, A.I. Fetisov. Reviewed by
N.M. Beskin and others. Mat. v shkole no. 4:57-69 S-O '57.
(Geometry) (MLRA 10:8)
(Nikitin, N.N.) (Fetisov, A.I.)

EDEL'GAUZ, A.; KATAVASOV, F., tkachnadomnik

Improved handloom. Prom. koop. 13 no.7:28 J1 '59.

(MIRA 12:10)

1. Nachal'nik tsekha ruchnogo tkachestva arteli invalidov "Tekstil'niyeks,"
Riga (for Edel'gauz).

(Riga--Hand weaving)

EDEL'GAUZ, G. E.

USSR/ Miscellaneous—Manufacturing organization

Card 1/1 : Pub. 28/33

Authors : Edel'gaus^Z, G. E., Engineer

Title : Regarding some questions in planning and the calculation of net cost of production in machine construction

Periodical : Vest. mash. 34/8, 90-96, Aug 1954

Abstract : An analysis is made of the dependence of overhead shop expenditures on the volume of production and the effect of the volume of semi-manufactured production on the net cost of finished production. Four Russian references: (1931-1953). Tables; graphs.

Institution :

Submitted :

EDMIL'GAUZ, G.Ye.

Calculation of laying out elliptic stampings. Avt.trakt.prom. no.1:
29 Ja '55. (MIRA 8:4)
(Sheet-metal work)

Edel'gauz, G. E.
Subject : USSR/Engineering

AID P - 4217

Card 1/1 Pub. 103 - 18/20

Author : Edel'gauz, G. E.

Title : Method for Construction of Norm Tables

Periodical : Stan. 1 instr., 1, 40-41, Ja 1956

Abstract : Tables of norms are widely used for determination of the technique to be applied for various cutting conditions to ascertain the time needed, the cost of material and tools, and the degree of accuracy required. The author presents a method for selection of the table of norms best-suited to give complete accuracy in a given problem, and of an intermediate section of the table ensuring a fixed mean accuracy. He develops formulae for practical purposes. One graph, 2 formulae. Three Russian references.

Institution : None

Submitted : No date

Edel'gaus, G. Ye.

AUTHOR: Edel'gaus, G. Ye., Engineer 28-4-6/35

TITLE: Selection of Preference Number Series (Vybor ryadov predpochtitel'nykh chisel)

PERIODICAL: Standartizatsiya, 1957, # 4, pp 25-27 (USSR)

ABSTRACT: The author gives equations by means of which the gradations of parameters, dimensions, etc., may be calculated in conformity with the GOST 8032-56 (preference number series), or by which the suitable preference number series may be selected by using given data. Examples of the use of such equations for solving problems in diameters of rolled bar metal, machining time (by the revolution numbers of machine tools), time norms (labor), are shown. There is one graph.

ASSOCIATION: All-Union Technological Design Institute (Vsesoyuznyy proyekt-no-tekhnologicheskii institut)

AVAILABLE: Library of Congress

Card 1/1

EDEL'GAUZ, G.Ye., inzh.

Norms for periods of time required to master production of parts used
in marine machinery manufacture. Sudostroenie 25 no.2:46-51 P '59.

(MIRA 12:4)

(Marine engineering)
(Efficiency, Industrial)

BERESLAVSKIY, L.D.; TSYGANKO, L.Z.; EDEL'GAUZ, G.Ye.

Evaluating the level of industrial mechanization in foundries.
Lit.proizv. no.7:8-10 J1 '61. (MIRA 14:7)
(Foundries -Equipment and supplies)

EDELGAUZ, G.

Determining the extent of mechanization of the production
processes in machine building. Mashinostroene 11 no:5:8 My '62.

EDEL'MAN, A. S.

"Investigation of the Outflow Process of Aluminum Alloys." Thesis for degree of Cand Technical Sci. Sub 27 Apr 50, Moscow Aviation Technological Inst

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

EDEL'MAN, A.S., kand.tekhn.nauk.

Concerning the "theory" of Schweisgut. TSvet.met. 26 no.4:57-61
Jl-Ag '53. (MIRA 10:10)
(Metallography) (Deformations (Mechanics))

EDLMAN, A.S., kand.tekhn.nauk; KHEYPETS, M.B., insh.

Method for controlling some processes of working metals by pressure.
TSvet.met. 28 no.3:67-69 My-Je '55 (MIRA 10:11)
(Power presses) (Wire)

EDEL'MAN, A.S.

136-2-12/22

AUTHOR: Edel'man, A.S., Candidate of Technical Sciences, and
Kheyfets, M.B., Engineer.

TITLE: Extrusion of Aluminum Cable-coatings. (Pressovaniye alu-
miyevykh kabel'nykh obolochek)

PERIODICAL: Tsvetnyye Metally, 1957, No.2, pp. 67 - 73 (USSR)

ABSTRACT: In this article the production of extruded aluminum
coatings to replace lead coatings on cables is dealt with.
After enumerating the deficiencies of lead as a coating mater-
ial, the authors show a table of relevant physical and mechan-
ical properties of lead, lead-antimony, magnesium, zinc, copper,
99.5% aluminum and 99.99% aluminum from which the superiority
of the latter is evident. Mentioning the fact that in the
USSR the production of a luminum coated cable was started in
1950-1951, the authors discuss processes used abroad and the
selection of extrusion conditions for aluminum of various
degrees of purity. Curves of initial and final pressures
against temperature for extrusion of 13 and 6.0 mm diameter
aluminum rod are given, together with a diagram of the vacuum
installation used for preventing rupture of the aluminum coat-
ing by air compressed in the extrusion process; details are
given of the process as used in the USSR with a sketch of the
coating installation. For 99.85% purity aluminum the

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Extrusion of Aluminum Cable-coatings.

136-2-12/22

following values of parameters are recommended: ingot and ingot-container temperature, 430-460 °C, extrusion working pressure, 80-85 kg/mm², maximal speed, up to 70/80 m/min, vacuum in container before start of extrusion 0.1-0.3 mm Hg. The methods adopted enable envelopes 6-35 mm in diameter and with wall thickness of 0.8-1.5 mm to be applied to cables from an ingot 205 mm in diameter and a total length of 1 020 mm with a container diameter of 210 mm. There are 4 figures, and two tables.

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AVAILABLE: Library of Congress

SOV/136-59-11-13/26

AUTHORS: Edel'man, A.S., Candidate of Technical Sciences, and
Shternberg, A.V.

TITLE: Extrusion of Thin-Walled Aluminium Sheaths

PERIODICAL: Tsvetnyye metally, 1959, Nr 11, pp 61-64 (USSR)

ABSTRACT: Thin aluminium sheaths might find application in coaxial cables as external conductors and in symmetrical connecting cables as screens, replacing the copper tubes and strips used nowadays. Such a substitution would considerably facilitate the manufacture of cables and bring about great economy in copper. Their many years experience in covering cables with lead and their experience in the extrusion of half-finished aluminium articles led the authors to assume that the solution of the problem of manufacturing bi-metallic conductors of small diameter and thin-walled sheath is to be sought in the field of extrusion. This method has been used in the laboratory by Akulichev (Ref.3). He made bi-metallic conductors with aluminium sheaths of between 2 and 12 mm diameter and 0.40 to 1.0 mm wall thickness. However, Akulichev's method of extrusion and his plant require further development before they can be applied on an

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Extrusion of Thin-Walled Aluminium Sheaths

industrial scale. The authors have paid particular attention to the construction of the extrusion press and the relationship between mandrel and die; the extrusion process as used in the normal cable presses has been retained practically unaltered. Fig.1 shows such an instrument for the extrusion of thin-walled aluminium sheaths. In order to exclude the influence of the extrusion procedure and other factors on the formation process and quality of the sheaths, the instrument was checked during the extrusion of aluminium tubes by the inverse flow method in a device adapted to the "Amsler" machine. The results of measurements of extruded tubes of between 4 and 8 m length are shown in Table 1. The extruded tubes were tested to fracture by internal pressure. The magnitude of the latter measured at the moment of fracture of the tube, was converted to σ_{TS} in tension and this was found to be 8.0 to 8.5 kg/mm². The percentage elongation was found to be 30 to 35%. The subsequent tests with the extrusion instrument were carried out in a special head (Fig.2) made for the extrusion of aluminium sheaths for conductors of various

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